

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Previously Presented) An implantable medical device, comprising:
a support structure formed such that magnetic field changes in a region immediately proximate the support structure, induced by a magnetic resonance imaging process, are substantially unobstructed by the support structure; and
a magnetic material at least embedded into at least part of the support structure.
2. (Previously Presented) The implantable medical device of claim 1 wherein the implantable medical device comprises a stent, the support structure forming a generally tubular structure that is substantially non-magnetic, and wherein the magnetic material is at least embedded into the generally tubular structure such that at least part of the generally tubular structure is visible during a magnetic resonance imaging procedure.
3. (Original) The implantable medical device of claim 2 wherein the generally tubular structure is made of a metallic material.
4. (Original) The implantable medical device of claim 3 wherein the metallic material is at least one of Nitinol, stainless steel, tantalum, niobium, titanium and copper.
5. (Original) The implantable medical device of claim 2 wherein the generally tubular structure is made of at least one of a polymer and a ceramic.

6. (Original) The implantable medical device of claim 2 wherein the generally tubular structure is made of a biodegradable material.

7. (Original) The implantable medical device of claim 1 wherein the magnetic material is paramagnetic.

8. (Original) The implantable medical device of claim 1 wherein the magnetic material is ferromagnetic.

9. (Original) The implantable medical device of claim 1 wherein the magnetic material includes at least one of iron, dysprosium, gadolinium, terbium, copper, cobalt, manganese, chromium and nickel.

10. (Previously Presented) The implantable medical device of claim 2 wherein the generally tubular structure includes an at least one end portion and the magnetic material is applied only to the at least one end portion.

11. (Original) The implantable medical device of claim 2 wherein the generally tubular structure includes a first end portion and a second end portion and the magnetic material is applied only to the first end portion and the second end portion.

12-18. (Canceled).

19. (Withdrawn) A method for making an implantable medical device, comprising:

forming a support structure such that magnetic field changes in a region immediately proximate the support structure, inducing by a magnetic resonance imaging process, are substantially unobstructed by the support structure; and

applying a magnetic material to at least part of the support structure such that the support structure is visible during a magnetic resonance imaging procedure.

20. (Withdrawn) The method of claim 19 wherein-applying comprises using a plasma immersion ion implantation process.

21. (Withdrawn) The method of claim 20 wherein applying further comprises shielding a portion of the support structure so that the magnetic material is applied to only an at least one end portion of the support structure.

22. (Withdrawn) The method of claim 20 wherein applying further comprises shielding the support structure so that the magnetic material is only applied to a first end portion and a second end portion of the support structure.

23. (Withdrawn) The method of claim 19 wherein the support structure is made of a metallic material.

24. (Withdrawn) The method of claim 23 wherein the metallic material is at least one of Nitinol, stainless steel, tantalum, niobium, titanium and copper.

25. (Withdrawn) The method of claim 19 wherein the support structure is made of at least one of a polymer and a ceramic.

26. (Withdrawn) The method of claim 19 wherein the support structure is made of a biodegradable material.

27. (Withdrawn) The method of claim 19 wherein the magnetic material is paramagnetic.

28. (Withdrawn) The method of claim 19 wherein the magnetic material is ferromagnetic.

29. (Withdrawn) The method of claim 19 wherein the magnetic material includes at least one of iron, dysprosium, gadolinium, terbium, copper, cobalt, manganese, chromium and nickel.

30. (Previously Presented) An elongated medical instrument comprising:
a support structure including a segment of material helically oriented about an axis of the instrument wherein the material is at least one of a polymer and a ceramic; and
a magnetic material at least embedded into the segment.

31. (Original) The instrument of claim 30 wherein the magnetic material is paramagnetic.

32. (Original) The instrument of claim 30 wherein the magnetic material is ferromagnetic.

33. (Original) The instrument .of claim 30 wherein the magnetic material includes at least one of iron, dysprosium, gadolinium, terbium, copper, cobalt, manganese, chromium and nickel.

34. (Previously Presented) A stent comprising:
a generally tubular structure made of a metallic material that is substantially non-magnetic; and
a magnetic material at least embedded into the metallic material for rendering the generally tubular structure visible during a magnetic resonance imaging procedure.

35. (Previously Presented) The stent of claim 34 wherein the metallic material is at least one of Nitinol, stainless steel, tantalum, niobium, titanium and copper.

36. (Previously Presented) The stent of claim 34 wherein the magnetic material is a paramagnetic material.

37. (Previously Presented) The stent of claim 34 wherein the magnetic material is a ferromagnetic material.

38. (Previously Presented) The stent of claim 34 wherein the magnetic material includes a material that is at least one of iron, dysprosium, gadolinium, terbium, copper, cobalt, manganese, chromium and nickel.

39. (Previously Presented) The stent of claim 34 wherein the generally tubular structure includes an at least one end portion and the magnetic material is at least embedded into only the at least one end portion.

40. (Previously Presented) The stent of claim 34 wherein the generally tubular structure includes a first end portion and a second end portion and the magnetic material is at least embedded into only the first end portion and the second end portion.

41. (New) A stent comprising:
a tubular structure comprising:
a plurality of rings comprising electrically conductive material, wherein each ring forms a serpentine path around the tubular structure;
connectors, comprising electrically conductive material, extending between and connecting adjacent rings to one another;

an electrical discontinuity, comprising insulating material, provided in each ring to prevent an electrically conductive loop from forming, and magnetic material embedded into the tubular structure only at end portions of the tubular structure.

42. (New) The stent of claim 41 further comprising electrical discontinuities provided in one or more of the connectors.

43. (New) A guide wire comprising:
a stiff proximal portion;
a flexible distal portion; and
a transmission portion, with varying intermediate stiffness, disposed between the stiff proximal portion and the flexible distal portion,
wherein a distal segment of the guide wire, comprising the flexible distal portion, the transmission portion and at least part of the stiff proximal portion, follows a substantially helical path about a longitudinal axis of the guide wire; and
wherein a magnetic material is embedded in at least the distal segment.